

Application No.: 10/789,206  
Attorney Docket No.: 25238B

**IN THE CLAIMS**

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1. (Currently Amended) An aqueous A-sizing composition for glass fibers, said sizing composition being compatible with a phenolic pultrusion process comprising:

1 - 7 percent by weight of a polyamide film forming polymer;

0.5 - 3.0 percent by weight of an organosilane ~~a silane~~-coupling agent;

0.5 - 3.0 percent by weight of a non-ionic lubricant;

0.2 - 3.5 percent by weight of a cationic lubricant; ~~and~~

greater than 0 and up to 3 percent by weight of a water dispersible polyether based polyurethane solution; and

water in an amount sufficient to attain a desired ratio of solids.

2. (Canceled)

3. (Original) The sizing composition of claim 1, wherein the non-ionic lubricant is a polyoxyalkylated polyalkylene glycol ester.

4. (Original) The sizing composition of claim 3, wherein the non-ionic lubricant is polyethylene glycol mono-oleate.

5. (Canceled)

6. (Currently Amended) The sizing composition of claim 1-5, wherein the organosilane silane-coupling agent is selected from the group consisting of gamma-aminopropyltriethoxy silane, N-beta (aminoethyl) gamma-aminopropyltrimethoxy silane, vinyltrimethoxy silane, gamma-glycidoxypolypropyltrimethoxy silane and phenylaminopropyltrimethoxy silane.

7. (Original) The sizing composition of claim 1, wherein the cationic lubricant is a partially amidated polyalkylene imine.

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8. (Currently Amended) The sizing composition of claim 7, wherein the partially amidated polyalkylene imine is a condensation reaction product of polyethylene imine with at least one a fatty acid selected from the group consisting of pelargonic acid and caprylic acid.
9. (Original) The sizing composition of claim 1, wherein the sizing composition provides an increased compatibility between individual glass fibers and a matrix resin in a phenolic pultrusion process.
10. (Currently Amended) The sizing composition of claim 1, wherein ~~the silane coupling agent is an organosilane,~~ the non-ionic lubricant is a polyoxyalkylated polyalkylene glycol ester, and the cationic lubricant is a partially amidated polyalkylene imine.
11. (Currently Amended) A method of making an aqueous a-sizing composition for a glass fiber that is compatible with a phenolic pultrusion process comprising:  
admixing 1 - 7 percent by weight of a polyamide film former, 0.5 - 3.0 percent by weight of an organosilane a silane-coupling agent, 0.5 - 3.0 percent by weight of a non-ionic lubricant, 0.2 - 3.5 percent by weight of a cationic lubricant; ~~and greater than 0 and up to 3 percent by weight of a water dispersible polyether based polyurethane solution to form an admixture, and water in an amount sufficient to achieve a desired ratio of solids to form an admixture; and~~  
agitating the admixture for a period of time sufficient to provide a homogenous composition.
12. (Currently Amended) The method of claim 11, wherein ~~the silane coupling agent is an organosilane,~~ the non-ionic lubricant is a polyoxyalkylated polyalkylene glycol ester~~[[,]]~~ and the cationic lubricant is a partially amidated polyalkylene imine.
13. (Original) The method of claim 11, wherein the period of time sufficient to form an admixture is 5 - 10 minutes.

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14. (Currently Amended) The method of claim 11, further comprising:  
individually pre-mixing the film forming polymer, the organosilane silane-coupling agent, the non-ionic lubricant, and the cationic lubricant in the water to form a pre-mix of each of the film forming polymer, the silane coupling agent, the non-ionic lubricant, and the cationic lubricant.
15. (Original) The method of claim 14, wherein the pre-mix is maintained at a temperature of approximately 70 - 80 °F.
16. (Original) The method of claim 14, wherein the water is demineralized water.
17. (Original) A fiber product comprising at least one glass fiber coated with a sizing composition according to claim 1.
18. (Currently Amended) A method of forming a sized glass fiber comprising:  
applying an aqueous a-sizing composition compatible with a phenolic pultrusion process to at least one glass fiber, the sizing composition including:  
1 - 7 percent by weight of a polyamide film forming polymer;  
0.5 - 3.0 percent by weight of a silane coupling agent;  
0.5 - 3.0 percent by weight of a non-ionic lubricant;  
0.2 - 3.5 percent by weight of a cationic lubricant;  
greater than 0 and up to 3 percent by weight of a water dispersible polyether based polyurethane solution; and  
water in an amount sufficient to achieve a desired ratio of solids; and  
drying the sizing composition onto the at least one fiber to form a sized glass fiber;  
wherein the sizing composition provides an increased compatibility between individual glass fibers and a matrix resin in the phenolic pultrusion process.
19. (Previously Presented) The method of claim 18, the silane coupling agent is an organosilane, the non-ionic lubricant is a polyoxyalkylated polyalkylene glycol ester, and the cationic lubricant is a partially amidated polyalkylene imine.

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20.-21. (Canceled)

22. (New) An aqueous sizing composition comprising:  
1.0 - 7.0 percent by weight of a polyamide film forming polymer;  
0.5 - 3.0 percent by weight of a silane coupling agent;  
0.5 - 3.0 percent by weight of a non-ionic lubricant;  
0.2 - 3.5 percent by weight of a cationic lubricant; and  
water in an amount to achieve a desired ratio solids,  
wherein said sizing composition is a glass fiber sizing composition compatible with a phenolic pultrusion process.

23. (New) The sizing composition of claim 22, further comprising:  
up to 3.0 percent by weight of a water dispersible polyether based polyurethane solution.

24. (New) The sizing composition of claim 22, wherein said silane coupling agent is an organosilane, said non-ionic lubricant is a polyoxyalkylated polyalkylene glycol ester, and said cationic lubricant is a partially amidated polyalkylene imine.

25. (New) The sizing composition of claim 24, wherein said partially amidated polyalkylene imine is a condensation reaction product of polyethylene imine with at least one fatty acid selected from the group consisting of pelargonic acid and caprylic acid.